HP Designjet Z2100 Photo Printer series

BREAKTHROUGH COLOR: Achieve consistent & accurate color with the first ever embedded spectrophotometer[1]

- **Automatic and simple creation of ICC profiles.** HP's embedded spectrophotometer and an automated workflow bring simplicity and reliability to accurate profiling and precise printer calibration. HP's Advanced Profiling Solution offers additional options for profiling and calibrating your color system.
- **Expect consistent color from print to print.** Calibrate the printer and begin delivering print-to-print and printer-toprinter color repeatability.
- **Fast color stability covering a broad gamut:** Stable proofs in less than 5 minutes, and with over 80% PANTONE® coverage[2], and full compliance with prepress standards: SWOP, ISO, GRACOL, EUROSCALE, TOYO, FOGRA, and 3DAP.

TRUE CREATIVE EXPRESSION: Get vivid, long-lasting quality with an 8-ink printing system with HP Vivera pigment inks

- **Water resistant prints resist fading for over 200 years[3]:** HP 70 Vivera pigment inks with an 8-ink printing system achieve a unique combination of consistently outstanding image quality. Your photos, posters, presentations and maps will be water-resistant and will resist fading for over 200 years[3] on a range of HP creative and specialty media.
- **Rich, dark blacks on matte and glossy papers without swapping cartridges.** The HP Three-Black Ink set consists of matte black, photo black, and light gray HP Vivera pigment ink cartridges that reside in the printer at all times.
- **Achieve consistent results on a wide range of papers.** Choose from a variety of HP papers from plain to glossy, including backlit, indoor banner, and other specialty papers.

TRUE PRINT CONFIDENCE: Print with greater confidence thanks to dependable HP technologies

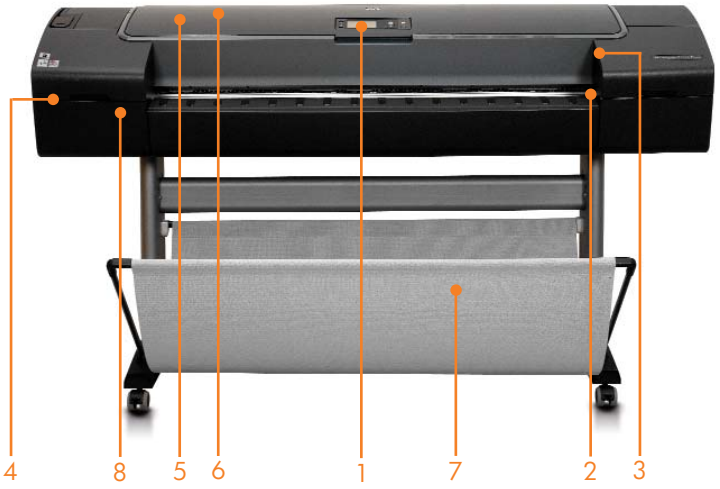
- **Eliminate trial and error with real-time layout and orientation preview.** Take the guess work out of margins. Save time and materials.
- **Glide effortlessly through color management and printing** with the HP Color Center tool.
- **Save time with HP Easy Printer Care/HP Printer Utility software.** Monitor the status of printers & supplies and get the latest updates.
- **Expect always-on quality** with automatic servicing routines that are economical and convenient thanks to proactive printhead maintenance.
- **Have your questions answered.** Application settings and color management consultation at your finger tips with the HP Knowledge Center.

invent

(1 With i1 color technology.
(2 HP's preliminary, internal results have shown that the HP Designjet Z Photo Printer series is capable of successfully simulating over 80% of the PANTONE colors. HP Designjet Z2100 and Z3100 Photo Printers are pending PANTONE-licensing
(3 Display permanence rating by Wilhelm Imaging Research, Inc. on a range of HP creative and specialty media. For details: http://www.hp.com/go/supplies/printpermanence

HP Designjet Z2100 Photo Printer series

1. LCD front panel and direct access keys for ink supply maintenance and print message alerts.
2. Front bypass slot accommodates media up to 24 in/609 mm wide (24" printer) or up to 44 in/1117 mm (44" printer)
3. Mounted on the carriage, the embedded spectrophotometer[1] brings accurate profiling and precision color calibration
4. Rear USB 2.0 High Speed and 10/100 BT Ethernet connection for TCP/IP. Free slot for additional network connectivity with 1 EIO HP Jetdirect card
5. Rear bypass slot handles heavy and rigid media of weights up to 500 g/m^2 and thickness up to 0.8 mm.
6. Roll feed (located at the back of the printer) feeds rolls up to 24 in/609 mm wide (for 24" printer) or up to 44 in/1117 mm (for 44" printer) and 300 ft/91 m long
7. Media bin
8. 8 HP Vivera pigment ink set with 4 pl & 6 pl drop size for prints that resist fading for over 200 years[3]



Optional accessories

HP-GL/2 Upgrade Kit. For CAD customers that need improved line quality and network availability with the HP-GL/2 software key. The printer –rather than the computer– processes files for improved operating efficiency. Store and reprint files from the printer queue and print legacy HP-GL/2 files.

The HP Advanced Profiling Solution, powered by GretagMacbeth™ technology, offers a color management system that works in combination with the spectrophotometer embedded in the printer. This automated solution enables you to perform: monitor profiling and calibration, ambient light and monitor-profile validation, RGB and CMYK profiling with optimized inkjet separations for HP Media in addition to the most common separations (Inkjet 260 and 400), and rigorous fine-tuning of printer color profiles. A very intuitive profile-editing wizard lets you match colors to, for example, output viewing conditions that use non-standard illuminants.

Additional 24" and 44" spindles make life easier for professional photographers and graphic designers, spare spindles mean that they can have different media types ready to load. Also available, for design professionals such as architects, engineers, and GIS specialists, is an additional 44" spindle for easy switching between technical media rolls. This technical media spindle is recommended for use with Plain, Bright White Bond, Coated, Natural Tracing and Translucent Bond papers, and Vellum.

The Efi Designer Edition 5.1 XL for HP is the recommended RIP and proofing application for your HP Designjet printer. Integrating this enables CMYK workflow support, PostScript® & PDF printing, and accurate spot color management for designers, photographers, and other creative professionals. A powerful, yet cost effective digital proofing system that allows full control over digital proofing needs to speed up workflows, saving both time and money.

Services

A number of standard services come in the printer box to enable you to print with confidence right from the start:

- **HP Start-up Kit** enables you to easily install the printer on your own. Includes: drivers for both Mac® and Windows®, multimedia training in how to operate the printer, and PDF user manuals for easier consultation.
- **Online HP Knowledge Centre** helps you to fit your printer into your workflow. Benefit from: multimedia training sessions, step-by-step guides, access to relevant forums and blogs, contact details for HP support, and information on the latest drivers and firmware.
- **HP Easy Printer Care (Windows®) or Printer Utility (Mac®)** ensure that you always know how your printer is doing by sending you alerts on everything from job accounting to color control.

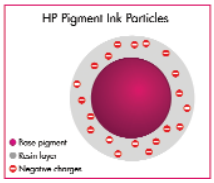
See www.hp.com/go/graphic-arts for full details on all services.

For enhanced services purchase from the HP Professional Graphic Services portfolio, which includes:

- **HP Installation Care Pack Services:** Easier to get your printer up and running in minimum time. Stand alone and network options available.
- **HP Color Expert Service powered by X-Rite Color Services:** Problems getting the right color from your printer? Call one phone-number for immediate, reliable answers to all of your questions on color, color management software and hardware, RIPs, design applications, output devices, drivers and operating systems.
- **HP Care Pack and Post Warranty Services:** Reduce downtime and mitigate the risk of unbudgeted repair costs. 3-5 year warranty extensions available.

See back page for ordering information and visit www.hp.com/go/pgs for more details on all options.

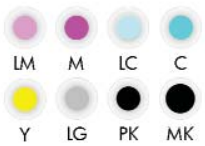
Key technologies



Electrosteric Encapsulation Technology

HP Vivera pigment inks offer outstanding image quality and fade resistance on a wide variety of photo and fine art media, along with water resistance on a range of HP creative and specialty media. HP's proprietary Electrosteric Encapsulation Technology optimizes the pigment chemistry and ink properties for stability and performance to ensure a broad color gamut, print permanence, excellent gloss uniformity, and reliable, accurate, and consistent printing.

The HP embedded spectrophotometer with i1 Color Technology from GretagMacbeth is mounted on the printer carriage and revolutionizes professional color workflows by automating media profiling. It allows users to automatically generate custom RGB ICC profiles for their preferred media and provides accurate measurements for printer calibration that delivers print-to-print and printer-to-printer color consistency. Also, with the optional HP Advanced Profiling Solution, you can edit and modify existing profiles and create CMYK profiles.



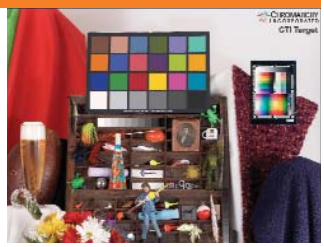
HP's 8-ink printing system is made up of the exclusive HP Vivera pigment ink formulation technology with HP 70 Printheads, each printing two colors of ink with 1,056 nozzles per color, and the HP Three-Black Ink set. Ensures exceptional color accuracy and consistency: a valuable tool for graphic designers and prepress professionals who need repeatable results. The HP Designjet Z series are also the first large-format printers to employ HP Scalable Printing Technology, providing superior reliability and optimized ink consumption.

An extensive media portfolio: HP offers a portfolio of 9 photo papers, 10 digital fine art papers, 3 proofing papers, 9 bond and coated papers, and over 30 other HP media. All have been tested with HP 70 Vivera pigment inks to deliver consistent, museum-quality prints that withstand the demands of handling, display and storage expected of professional prints.

High-quality creative prints, prepress proofs, and technical images

Proofing

- Have proofs approved in record time: Colors stabilize in less than 5 minutes.
- Print consistent and accurate colors across a wide range of media thanks to automated printer calibration and ICC profiling.
- Produce high-quality black-and-white proofs: The 8 HP Vivera pigment inks include three blacks that give excellent gray neutrality.



Design

- Make an impact by presenting concepts and designs in large format and with accurate colors right from the start of your project. The printer accepts paper up to 44 inches wide (24 inches on the smaller model) and covers over 80% of PANTONE colors.[2]
- Get consistent colors, print after print and from one printer to another, thanks to automated printer calibration.

Commercial photography

- Create neutral black-and-white prints with the printer's 3 black inks. No need to waste ink when changing between matte and glossy papers: All three blacks are always on board.
- Produce consistent and accurate color photo proofs thanks to the printer's unique, built-in calibration technology and broad color gamut.
- Print on almost any media: The printer creates the new media profiles for you, and you can use thick stock of up to 500 g/m^2.

Display graphics

- Print full-color, long-lasting posters, banners, and displays on a wide range of media.
- Create persuasive marketing collateral, point-of-sales material, and tradeshow displays with photo quality images and consistent, accurate colors.

Technical imaging

- Produce impressive renderings, photo-realistic prints, maps, satellite images, and presentations panels with superior quality, consistency, and durability.
- Architects, engineers, industrial designers, and GIS specialists all benefit from easy, predictable, and reliable printing.

HP Designjet Z2100 Photo Printer series

Technical specifications

Print speed	
Best	15 min/page on D/A1 or up to 17 ft²/h (color image on glossy paper)
	9.8 min/page on D/A1 or up to 31 ft²/h (color image on coated paper)
Normal	7.9 min/page on D/A1 or up to 38 ft²/h (color image on glossy paper)
	4.2 min/page on D/A1 or up to 72 ft²/h (color image on coated paper)
Draft	5.8 min/page on D/A1 or up to 52 ft²/h (color image on glossy paper)
	2.0 min/page on D/A1 or up to 150 ft²/h (color image on coated paper)
Resolution	
Best (Color and B&W)	2400 x 1200 optimized dpi
Normal (Color and B&W)	600 x 600 dpi
Draft (Color and B&W)	600 x 600 dpi
Memory	
	128 MB Standard memory, 40 GB hard disk
Media	
Handling	Sheet feed, roll feed, automatic cutter (cuts all media except canvas)
Types	Photographic paper (satin, gloss, semi-gloss, matte), proofing paper (high-gloss, semi-gloss, matte), fine art printing material (canvas, smooth, textured, watercolor), self-adhesive and vinyl (polypropylene, vinyl), sign and banner (display film, banner, scrim, polypropylene, Tyvek®, outdoor paper), backlit, bond and coated (bond, coated, heavyweight coated, super heavyweight coated)
Maximum weight	500 g/m²
Size	**HP Designjet Z2100 24" Photo Printer:** All standard sizes larger than Letter/A4 up to 24 in/609 mm wide
	HP Designjet Z2100 44" Photo Printer: All standard sizes larger than Letter/A4 up to 44 in/1117 mm wide
Maximum external roll diameter	5.11 in/140 mm
Maximum roll length	300 ft/91 m
Printing	
Margins	**Roll:** 0.2 x 0.2 x 0.2 x 0.2 in/5 x 5 x 5 x 5 mm (full bleed available on glossy roll media)
	Sheet: 0.2 x 0.2 x 0.2 x 0.55 in/5 x 5 x 5 x 14 mm
Technology	HP Vivera pigment inks, HP Three-Black ink set, HP Embedded Spectrophotometer
Ink cartridge colors	Light cyan, light magenta, light gray, photo black, cyan, magenta, yellow, matte black
Ink types	HP Vivera pigment inks
Ink drop	4 pl (light cyan, light magenta, light gray, photo black), 6 pl (cyan, magenta, yellow, matte black)
Ink cartridge size	130 ml ink cartridges (69 ml introductory ink cartridges included in 24" printer box, not available as replacement cartridges); 130 ml Ink Cartridge Twin Packs also available
Nozzles	2 colors per printhead, 1056 nozzles per color
Maximum print length	300 ft/91 m (OS and application dependent)
Line accuracy	+/- 0.2 %
Lightfastness	Over 200 years[3 fade resistance
Water resistance	Water-resistant on a range of HP creative and specialty media
Connectivity	**Standard:** One 10/100 BT Ethernet, One USB 2.0 high-speed certified port, One EIO Jetdirect accessory slot
	Optional: HP Jetdirect EIO print servers
Print Languages	**Standard:** HP PCL3GUI
	Optional: PS via optional software RIP, HP-GL2/TRL/RTL optional software solution
Image quality	
Color accuracy	Median <1.6 dE2000, 95% of colors <2.8 dE2000[4
Short term color stability	<1 dE2000 in less than 5 minutes[5
Long term print-to-print repeatability	Average <0.5 dE2000, 95% of colors <1.4 dE2000[5
Maximum optical density	4 L* / 2.4 D[6

(4 ICC absolute colorimetric accuracy on HP Proofing Matte paper
(5 With HP Premium Instant Dry Photo Satin media, right after calibration
(6 With HP Premium Instant Dry Photo Gloss media
(7 Replacement ink cartridges available are HP 70 130 ml Ink Cartridges and HP 70 130 ml Ink Cartridge Twin Packs. For more information, visit www.hp.com/go/pageyield

Environmental ranges	
Operating temperature	41 to 104°F/5 to 40°C
Recommended operating temperature	59 to 95°F/15 to 35°C
Storage temperature	-13 to 131°F/-25 to 55°C
Recommended operating humidity	20 to 80% RH
Recommended storage humidity	0 to 95% RH
Acoustic	
Sound pressure, active	44 dB(A)
Sound pressure, standby	29 dB(A)
Sound power, active	6.5 B(A)
Sound power, standby	4.4 B(A)
Power consumption	
Active	200 watts
Maximum	200 watts
Powersave	27 watts
Standby	43 watts
Power requirements	Input voltage auto-ranging 100 to 240 VAC (+/- 10%), 50/60Hz (+/- 3 Hz), 2 Amp max
Certification	
Safety	IEC 60950-1 compliant, EU LVD and EN 60950-1 compliant, certified by CSA for Canada and US, Argentina IRAM, Singapore PSB, Russia GOST, China CCIB, Taiwan BSMI
Electromagnetic	Compliance for Class B products: EU (EMC Directive), USA (FCC rules), Canada (DoC), Australia (ACA), New Zealand (MoC), China (CCC), Japan (VCCI), Korea (MIC) and Taiwan (BSMI)
Energy Star® compliant	Yes
Press standard	100% coverage of SWOP, ISO and GRACOL, and 3DAP

Warranty		1 year warranty with on-site, next business-day service
Warranty extensions	UF028PE	HP 1yr Post Warranty Next-Business-Day Service
	HC132PE	HP 1yr Post Warranty Phone Only Hardware Service
Care Packs	UF017E	HP 3yr Next-Business-Day Service
	UF018E	HP 4 yr Next-Business-Day Service
	UF019E	HP 5 yr Next-Business-Day Service
	H7604E	HP Installation mid-high Designjet Service
	H4518E	HP Network Installation Designjet Windows®/Mac® Service
Color Services	UF050E	1yr/5 cases HP Color Expert Service
	UF315E	1 case HP Color Expert Service

More information on products, technologies and services available at www.hp.com/go/graphic-arts

Recommended system requirements	
Macintosh	Mac OS X v10.2, v10.3, v10.4 and later, PowerPC G4, G5, or Intel Core Processor, 1 GB Ram, 2 GB available hardware disk
Windows	Microsoft Windows XP or 2000: Pentium IV, 3 GHz, 1GB RAM, 2 GB available hard disk
Dimensions (w x d x h)	
Printer with stand	**HP Designjet Z2100 24" Photo Printer:** 49.7 x 28.8 x 41.2 in / 1262 x 732 x 1047 mm
	HP Designjet Z2100 44" Photo Printer: 69.7 x 28.8 x 41.2 in / 1770 x 732 x 1047 mm
Shipping Dimensions	**HP Designjet Z2100 24" Photo Printer:** 57.8 x 30.7 x 29.1 in / 1470 x 780 x 740 mm
	HP Designjet Z2100 44" Photo Printer: 77.2 x 30.5 x 23.6 in / 1960 x 775 x 600 mm
Weight	
Printer with stand	**HP Designjet Z2100 24" Photo Printer:** 143 lb/65 kg
	HP Designjet Z2100 44" Photo Printer: 189 lb/86 kg
Shipping weight	**HP Designjet Z2100 24" Photo Printer:** 225 lb/102 kg
	HP Designjet Z2100 44" Photo Printer: 271 lb/123 kg

What's in the box

HP Designjet Z2100 24" Photo Printer: spindle, printheads (4 x 2 colors), ink cartridges (8 x 69 ml)[7, media high gloss photo sample roll (24 in x 15 ft), stand (24"), rear tray (24"), adaptor 3" KIT for spindle (2), quick reference guide, set-up poster, USB cable, power cord, HP Start-up kit including printer software and training

HP Designjet Z2100 44" Photo Printer: spindle, technical spindle, printheads (4 x 2 colors), ink cartridges (8 x 130 ml), media high gloss photo sample roll (36" x 15 ft), stand (44"), rear tray (44"), 3" KIT for spindle (2), quick reference guide, set-up poster, USB cable, power cord, HP Start-up kit including printer software and training

Ordering information

Product
Q6675A HP Designjet Z2100 24" Photo Printer
Q6677A HP Designjet Z2100 44" Photo Printer

Accessories
Q6643D EFI Designer 5.1 for HP XL International
Q6692A HP GL/2 Upgrade Kit for the HP Designjet Z2100/Z3100 Photo series
Q6695A HP Advanced Profiling Solution International
Q6698A HP Designjet ZX100 44 inch Spindle for printing on technical media
Q6699A HP Designjet ZX100 44 inch Spindle for graphics (spare spindle for easy media switching)
Q6700A HP Designjet ZX100 24 inch Spindle for graphics (spare, for easy media switching)

Printing supplies
Printheads
C9404A HP 70 Matte Black & Cyan Printhead
C9405A HP 70 Light Magenta & Light Cyan Printhead
C9406A HP 70 Magenta & Yellow Printhead
C9407A HP 70 Photo Black & Light Gray Printhead
130 ml ink cartridges
C9448A HP 70 Matte Black 130 ml Ink Cartridge
C9449A HP 70 Photo Black 130 ml Ink Cartridge
C9451A HP 70 Light Gray 130 ml Ink Cartridge
C9452A HP 70 Cyan 130 ml Ink Cartridge
C9453A HP 70 Magenta 130 ml Ink Cartridge
C9454A HP 70 Yellow 130 ml Ink Cartridge
C9455A HP 70 Light Magenta 130 ml Ink Cartridge
C9390A HP 70 Light Cyan 130 ml Ink Cartridge
Ink cartridge twin packs
CB339A HP 70 Matte Black 130 ml Ink Cartridge Twin Pack
CB340A HP 70 Photo Black 130 ml Ink Cartridge Twin Pack
CB342A HP 70 Light Gray 130 ml Ink Cartridge Twin Pack
CB343A HP 70 Cyan 130 ml Ink Cartridge Twin Pack
CB344A HP 70 Magenta 130 ml Ink Cartridge Twin Pack
CB345A HP 70 Yellow 130 ml Ink Cartridge Twin Pack
CB346A HP 70 Light Magenta 130 ml Ink Cartridge Twin Pack
CB351A HP 70 Light Cyan 130 ml Ink Cartridge Twin Pack
Media supplies
Q7991A HP Premium Instant-Dry Gloss Photo Paper 24 in x 75 ft/610 mm x 22.9 m
Q7992A HP Premium Instant-Dry Satin Photo Paper 24 in x 75 ft/610 mm x 22.9 m
Q6626A HP Super Heavyweight Plus Matte Paper 24 in x 100 ft/610 mm x 30.5 m
C6029C HP Heavyweight Coated Paper 24 in x 100 ft/610 mm x 30.5 m
C6775A HP Colorfast Adhesive Vinyl 36 in x 40 ft/914 mm x 12.2 m
Q1898B HP Opaque Scrim 36 in x 50 ft/914 mm x 15 m
C6787A HP Banners with Tyvek® 36 in x 50 ft/914 mm x 15 m
Q7973A HP Matte Litho-realistic Paper 36 in x 100 ft/914 mm x 30.5 m
Q8663A HP Professional High-gloss Contract Proofing Paper 24 in x 100 ft/610 mm x 30.5 m
Q7991A HP Professional Semi-gloss Contract Proofing Paper 24 in x 100 ft/610 mm x 30.5 m
Q1968A HP Proofing Matte 24 in x 100 ft/610 mm x 30.5 m
Q8732A HP Hahnemühle Smooth Fine Art Paper 265 g/m² 24 in x 35 ft/610 mm x 10.7 m
Q8636A HP Hahnemühle Textured Fine Art Paper 265 g/m² 24 in x 35 ft/610 mm x 10.7 m
Q1984A HP Hahnemühle Watercolor Paper 36 in x 38 ft/914 mm x 11.58 m
Q8741A HP Aquarella Art Paper 24 in x 35 ft/610 mm x 10.7 m

More HP media sizes and weights available at www.hp.com/go/designjet/supplies